IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Mitsuaki OSHIMA

Serial No. NEW

Attn: APPLICATION BRANCH

Filed October 30, 2003

Attorney Docket No. 2003_1578

COMMUNICATION SYSTEM (Rule 1.53(b) Divisional of Serial No. 09/705,703, Filed November 6, 2000)

THE COMMISSIONER IS AUTHORIZED TO CHARGE ANY DEFICIENCY IN THE FEES FOR THIS PAPER TO DEPOSIT ACCOUNT NO. 23-0975

IDENTIFICATION OF CHANGE IN POWER OF ATTORNEY AND CORRESPONDENCE ADDRESS IN PARENT APPLICATION

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

As set forth in 37 C.F.R. § 1.63(d)(4), when the power of attorney or correspondence address was changed during prosecution of the prior application, the change of power of attorney or correspondence address must be identified in the continuation or divisional application.

In parent application Serial No. 09/379,746, the power of attorney, and thus the correspondence address, were changed on September 8, 2000. A copy of the Revocation of Previous Powers of Attorney and Granting of New Power of Attorney and the corresponding Statement Under 37 C.F.R. § 3.73(b) filed in the parent application are enclosed herewith.

Therefore, notwithstanding the power of attorney indicated on the copy of the Declaration from the parent application filed herewith, the power of attorney of the present divisional application remains with the firm of WENDEROTH, LIND & PONACK, L.L.P., and the correspondence address remains:

WENDEROTH, LIND & PONACK, L.L.P. 2033 K Street, N.W., Suite 800 Washington, DC 20006 (202) 721-8200

Respectfully submitted,

Mitsuaki OSHIMA

effrey R. Flipek

Registration No. 41,471 Attorney for Applicant

JRF/fs Washington, D.C. 20006-1021 Telephone (202) 721-8200 Facsimile (202) 721-8250 October 30, 2003

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INFORMATION DISCLOSURE STATEMENT

Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

Sir:

Pursuant to the provisions of 37 CFR 1.56, 1.97 and 1.98, Applicant requests consideration of [X] the references listed on attached form PTO-1449 and/or [] the additional information identified below in paragraph 3. A legible copy of each reference listed on the form PTO-1449 and each U.S. patent application listed below is enclosed, except a copy is not provided for each reference previously cited by or submitted to the Patent Office in prior parent application Serial No. 09/705,703.

1a. [X] This Information Disclosure Statement is submitted:

within three months of the filing date (or of entry into the National Stage) of the above-entitled application, or

before the mailing of a first Office Action on the merits or the mailing of a first Office Action after the filing of an RCE,

and thus no certification and/or fee is required.

1b.	[]	This Information Disclosure St	tatement is submitted
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after the events of above paragraph 1a and prior to the mailing date of a final Office Action or a Notice of Allowance or an action which otherwise closes prosecution in the application, and thus:

- (1) [] the certification of paragraph 2 below is provided, or
- (2) [] the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.
- 1c. [] This Information Disclosure Statement is submitted:

after the mailing date of a final Office Action or Notice of Allowance or action which otherwise closes prosecution in the application, and prior to payment of the issue fee, and thus:

the certification of paragraph 2 below is provided, and

the fee of \$180.00 specified in 37 CFR 1.17(p) is enclosed.

2. It is hereby certified

- a. [] that each item of information contained in this Information Disclosure

 Statement was first cited in any communication from a foreign patent office in a

 counterpart foreign application not more than three months prior to the filing of
 the Statement, or
- b. [] that no item of information contained in the Information Disclosure Statement was cited in a communication from a foreign patent office in a counterpart foreign application and, to the knowledge of the person signing the certification after making reasonable inquiry, was known to any individual designated in §1.56(c) more than three months prior to the filing of the Statement.
- 3. [] Consideration of the following list of additional information (including any copending or abandoned U.S. application, prior uses and/or sales, etc.) is requested.

4.		r each made	non-English language reference listed on the attached form PTO-1449, reference to:
	a.	[]	a full or partial English language translation submitted herewith,
	b.		a foreign patent office search report (in the English language) submitted herewith,
	c.	[]	the concise explanation contained in the specification of the present application at page,
	d.	[]	the concise explanation set forth in the attached English language abstract,
	e.	[X]	the concise explanation set forth below or on a separate sheet attached to the reference:
			JPA H05-218978 corresponds to U.S. Patent, No. 5,243,629 JPA 2-141049 corresponds to U.S. Patent No. 4,940,954 Japanese Patent No. 3-69295 corresponds to U.S. Patent No. 5,128,758 Japanese Patent No. 2-260726 corresponds to U.S. Patent No. 5,038,402 EP 0365431 corresponds to U.S. Patent No. 5,311,550

5. [X] A foreign patent office search report citing one or more of the references is enclosed.

Respectfully submitted,

Mitsuaki OSHIMA

y **YA**

leffrey R. Filipek Registration No. 41,471

Attorney for Applicant

JRF/fs Washington, D.C. 20006-1021 Telephone (202) 721-8200 Facsimile (202) 721-8250 October 30, 2003

Sheet 1 of 7						•				
FORM PTO 1449 (1	•	ENT OF COMMER		1		SERIAL NEW	ERIAL NO. IEW			
PATE	NT AND T	FRADEMARK OFFI	CE	APPLICANT Mitsuaki OSHIMA						
(L	Jse several	sheets if necessary) PTO: October 30,		FILING DATE October 30, 2003			GROUP			
				U.S. PATENT DO	CUMENTS					
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAM	IE CI	.ass	SUBCLASS	FILING D		
	AA	5,311,550	5-10-94	Fouche	et al.					
	АВ	4,630,287	12-16-86	Armst	rong					
	AC	4,271,527	6-2-81	Armst	rong			.,,		
	AD	5,050,188	9-17-91	Dir	r					
	AE	5,398,073	3-14-95	We	ei					
	AF	5,452,015	9-19-95	Hulya	likar			.,		
	AG	5,565,932	10-15-96	Citta	et al.	<u></u>			•	
	АН	5,481,412	1-2-96	Bannai	et al.					
	AI 3,909,721 9-30-75				ig et al.					
		.,		FOREIGN PATENT	DOCUMENTS					
		DOCUMENT NUMBER	DATE	COUNTRY CLASS		LASS	SUBCLASS	TRANS YES	LATION NO	
	AJ	0365431	4-25-90	E	D				Х	
	AK	0485105	5-13-92	EI	D			X		
	AL	92/14343	8-20-92	W	0			Х		
	AM	89/08366	9-8-89	W	0			X		
	AN	0031193	7-1-81	E	-			Х		
		01	HER DOCUMENT	(S) (Including Autho	r, Title, Date, Pertinent Pag	es, Etc.)		_		
	AO	Shinji Matsumo Telecommunica	to et al., "200 l itions Review,	Mb/s 16 QAM Di January 1982, v	gital Radio-Relay Sy ol. 24, no. 1, pages	stem Op 65-73.	erating in 4 and	5 GHz Ban	ds", Japan	
	AP	M. Pecot et al., Image Commun	"Compatible C nication, Octob	oding of Televis er 2, 1990, no. 3	ion Images, Part 2. 3, pages 259-268.	Compati	ble System", Sig	nal Process	sing	
	AQ	Mitsuaki Oshim	a, "Constellation	on-Code Division	n Multiplex for Digital	HDTV",	IEEE, 1992, pag	ges 1086-10	092.	
EXAMINER		<u> </u>			DATE CONSIDERED				., .,	

Sheet 2 of 7	n	•								
FORM PTO 1449 (modified) U.S. DEPARTMENT OF COMMERCE			CE	ATTY DOCKET 2003_1578	NO.	SERIAL NEW	NO.			
PATEN	IT AND	TRADEMARK OFFI	CE	APPLICANT · Mitsuaki OSHIMA						
(Us	se several	sheets if necessary) o PTO: October 30,		FILING DATE October 30, 2	2003		GROUP			
				U.S. PATENT DO						
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME CLASS		SUBCLASS FILING D. APPROP				
	AA	4,227,152	10-7-80	Godar	d et al.					
	АВ	4,525,846	6-25-85	Breme	r et al.			. –		
	AC	4,751,478	6-14-88	Yos	hida				·	
	AD	4,891,806	1-2-90	Farias	et al.					
	ÀΕ	4,903,125	2-20-90	Par	ker					
	AF	4,937,844	6-26-90	Ka	30					
	AG	5,164,963	11-17-92	Lawren	ce et al.					
	АН	5,555,275	9-1996	Oshima						
	AI	5,565,926	10-15-96	Bryan et al.						
			F	OREIGN PATENT	DOCUMENTS					
		DOCUMENT NUMBER	DATE	COU	NTRY CL	ASS	SUBCLASS	TRANSI YES		
	AJ	0311188	4-12-89	Ε	Р			Х		
	AK	0329158	8-23-89	Е	Р			х	·	
	AL	64-5135	1-10-89	J	Р	···		х		
	АМ	63-28145	2-5-88	J	Р			х		
	AN	62-133842	6-17-87	J	Р			х		
		от	HER DOCUMENT(S) (Including Autho	or, Title, Date, Pertinent Page	s, Etc.)				
	AO	Tricia Hill et al., COM-31, June			. 64-State QAM", IEEE	Transa	ctions on Comn	nunications,	vol.	
,	AP	Hideki Ishio et a	I., "A Proposal	of a Carrier Di	gital Transmission Sys	tem Usii	ng Multi-Level A	NPSK", page	s 1-20.	
	AQ	Shanmugam, "E	Digital and Anal	og Communica	ation Systems" 1979, p	. 272.				
EXAMINER	L				DATE CONSIDERED					

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copthis form with next communication to applicant.

Sheet 3 of 7									
FORM PTO 1449 (m	•	MENT OF COMMER	ece	ATTY DOCKET 2003_1578	NO.	SERIA NEW			
PATEN	NT AND	TRADEMARK OFFI	ICE	APPLICANT Mitsuaki OSHIMA					
(Us	se several	o PTO: October 30,		FILING DATE October 30, 2	FILING DATE October 30, 2003				
				U.S. PATENT DO	OCUMENTS				
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE		NAME CLASS		SUBCLASS	BCLASS FILING DATE IF APPROPRIATE	
	AA	5,105,442	4-14-92	V	/ei				
	АВ	4,048,572	9-13-77	Doglio	tti et al.				
	AC	5,282,019	1-25-94	Basile	e et al.				
	AD	5,311,547	5-10-94	\ \	/ei				
	AE	5,267,021	11-30-93	Ramchan	dran et al.				
	AF	5,038,219	8-6-91	Yamash	nita et al.	-			
	AG	5,087,975	2-11-92	Citta et al.					
	АН	5,086,340	2-4-92	Citta et al.					
	Al	5,243,629	9-7-93)3 Wei					
			<u></u> F	OREIGN PATENT	DOCUMENTS		•		
		DOCUMENT NUMBER	DATE	cour	NTRY C	CLASS	SUBCLASS	TRANSI YES	
	AJ	53-137657	12-1-78	J	Р			х	
	AK	0282298	9-14-88	Eur	ope			х	
	AL	0392538	10-17-90	Eur	ope			х	
	АМ	0490552	6-17-92	Eur	оре	<u> </u>		х	
	AN	0506400	9-30-92	Eur	оре			x	
		ОТІ	HER DOCUMENT(S) (Including Autho	or, Title, Date, Pertinent Pag	ges, Etc.)			<u> </u>
	AO	Khaled Fazel et 1085	al., Combined	multilevel codi	ng and multiresolutio	n modula	tion, February 8	, 1993, Pag	es 1081-
	АР	P. Hoeher et al., Global Telecomi	Performance of munications Co	of an RCPC-Co onference "Glo	oded OFDM-based D becom '91", Decemb	igital Aud er 2-5, 19	lio Broadcasting 991, Vol. 1 of 3, I	(DAB) Syst Pages 2.1.1	tem, IEEE - 2.1.7
	AQ	K. M. Uz et al., 0 Pages 283-292	Combined multi	resolution sou	rce coding and modu	lation for	digital broadcas	st of HDTV*,	1992,
EXAMINER					DATE CONSIDERED				
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Sheet 4 of 7		•									
FORM PTO 1449 (1	•	ENT OF COMMERC		ATTY DOCKET NO 2003_1578	0 .	1	ERIAL I	RIAL NO.			
PATE	NT AND T	TRADEMARK OFFICES CITED BY APPLICA	CE	APPLICANT Mitsuaki OSHIMA							
(0	lse several	sheets if necessary) PTO: October 30, 2		FILING DATE October 30, 20)03			GROUP	_ 		
				U.S. PATENT DOC							
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAM		CLASS	;	SUBCLASS	FILING E APPRO		
	AA	5,142,353	8-25-92	Kageyam	a et al.						
	AB	5,197,061	3-23-93	Halbert-Lass	salle et al.						
	AC	5,291,289	3-1-94	Hulyalka	r et al.						
	AD	5,166,924	11-24-92	Моо	se						
	AE	4,940,954	7-10-90	Aubert	et al.						
	AF	5,128,758	7-7-92	Azadega	n et al.						
	AG	5,038,402	8-6-91	Robb	Robbins						
	АН	5,638,112	6-10-97	0-97 Bestler et al.							
				FOREIGN PATENT I	OCUMENTS						
-		DOCUMENT NUMBER	DATE	COUNTRY CLASS		S	SUBCLASS	TRANS YES	SLATION S NO		
	Al	0448492A1	9-25-91	Euro	рре					X	
	AJ	0485108A2	5-13-92	Euro	рре				х		
	AK	0525641A2	2-3-93	Euro	рре	_			х	<u> </u>	
	AL	0540231A2	5-5-93	Euro	рре				X		
	АМ	0531046A2	3-10-93	Euro	рре				x	<u> </u>	
		ОТ	HER DOCUMENT	(S) (Including Autho	r, Title, Date, Pertinent	Pages, E	⊆tc.)				
	AN	K. M. Uz et al.,	Multiresolution	Source and Ch	annel Coding for l	Digital	Broad	lcast of HDTV,	1992, Page	es 61-69. 	
1	AO	Nambi Seshadr Fading Channe	i et al., Multi-L I, Vol. 4, No. 3	evel Block Code , May-June 1993	ed Modulations wit 3, Pages 325-334	th Une	qual E	rror Protection	for the Ray	leigh	
	AP	William F. Schr	eiber, Spread-	Spectrum Televi	ision Broadcasting	g, SMP	TE Jo	ournal, August	1992, Page	s 538-549.	
EXAMINER		<u> </u>			DATE CONSIDERED						

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copthis form with next communication to applicant.

Sheet 5 of 7	·	•								
FORM PTO 1449 (11		MENT OF COMMER	RCF	ATTY DOCKET NO. 2003_1578		SERIAL NEW				
PATEN LIST OF RE	NT AND	TRADEMARK OFFI CES CITED BY APPLIC	ICE	APPLICANT Mitsuaki OSHIMA						
		to PTO: October 30,	2003	FILING DATE October 30, 2003			GROUP			
				U.S. PATENT DOCUMENTS					,	
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CL	ASS	SUBCLASS	SUBCLASS FILING DATE IF APPROPRIATE		
,	AA	5,063,445	11-5-91	Nishizawa et al.						
	АВ	5,819,000	10-6-98	Oshima						
	AC	5,999,569	12-7-99	Oshima	<u> </u>					
	AD	5,892,879	4-6-99	Oshima						
		·	<u> </u>	FOREIGN PATENT DOCUMENTS						
		DOCUMENT NUMBER	DATE	COUNTRY	CLA	\SS	SUBCLASS	TRANSI YES	LATION NO	
	AE	7-99522	4-11-95	Japan				abstract		
	AF .	7-79415	3-20-95	Japan				abstract		
-	AG	5-75568	3-26-93	Japan				abstract		
	АН	86-07223	12-4-86	wo				Х		
	AI	2 187 611	9-9-87	Great Britain				Х		
	AJ	85/04541	10-10-85	wo				х		
	AK	04-196822	7-16-92	Japan				abstract		
	AL	2-166979	6-27-90	Japan				abstract		
	AM	64-74836	3-20-89	Japan				abstract		
	AN	53-108215	9-20-78	Japan				abstract		
		OTI-	HER DOCUMENT(S) (Including Author, Title, Date, Pertin	nent Pages	, Etc.)				
	AO	Martin Vetterli et Systems and Siç	al., Multiresolı پnal Processinç	ution Coding Techniques for D g, Volume 3, May 1992, Pages)igital Te s 161-18	levision 37.	ı: A Review, M	ultidimensio	nal ·	
	АР	Ezio Biglieri et al	I., Introduction	to Trellis-Coded Modulation w	vith Appl	ications	, April 6, 1992,	Pages 173-	207.	
	AQ	English Languag	je Abstract of E	European Patent No. 93 30 75	 ;75					
EXAMINER				DATE CONSIDER	RED					

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Sheet 6 of 7 FORM PTO 1449 (n	•		<u> </u>	ATTY DOCKET NO. SERIAL NEW			IAL NO.			
PATE	NT AND T	IENT OF COMMERI FRADEMARK OFFICE ES CITED BY APPLICE	CE	APPLICANT Mitsuaki OSHIMA						
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				<u> </u>	U.S. PATENT DOCUMENTS					
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAM	ne C	LASS	SUBCLASS	FILING D APPROF		
	AA	4,636,876	1-13-87	Schw	artz	··				
	AB	4,855,692	8-8-89	Kennard	d et al.	<u> </u>		· _#-		
	AC	4,873,701	10-10-89	Tret	ter					
	AD	4,958,360	9-18-90	Sa	ri	·				
	AE	5,115,453	5-19-92	Calderba	nk et al.					
	AF	5,168,509	12-1-92	Nakamui	ra et al.					
	AG	5,600,672	2-4-97	Oshima	et al.					
	АН	6,049,651	4-11-00	Oshi	ma	÷		_		
Al 6,256,357 7-3-01 Oshima				ma						
				FOREIGN PATENT I	DOCUMENTS			· · · · · · · · · · · · · · · · · · ·		
		DOCUMENT NUMBER	DATE	COUN	TRY (CLASS	SUBCLASS	TRANSI YES	SLATION S NO	
	AJ	0122805	10-24-84	EI	P			х		
	AK	63-180280	7-25-88	JF	>	· 		abstract		
	AL	64-68144	3-14-89	Jap	an			abstract		
	АМ	5-218978	8-27-93	Jap	an				Х	
	AN	3-69295	3-25-91	Jap	an				Х	
		10	HER DOCUMENT	(S) (Including Autho	r, Title, Date, Pertinent Pa	ges, Etc.)				
	AO	Kazuhiko Nitad Conference on	ori, Synthesis (Communicatio	of Multichannel (ns, June 14-16,	Orthogonal VSB Sig 1976, Volume 1, Pa	nals by C ges 3-25	tuadrature Meth - 3-29.	od, 1976 Int	ernational	
	AP	Thomas M. Cov	ver, Broadcast	Channels, IEEE	Transactions on In	formation	Theory, Januar	y 1972, Pag	es 2-14	
	AQ	"Optimum Weig COM-26, No. 6	hted PCM for , June 1978, P	Speech Signals' ages 872-881.	", Sundberg, IEEE T	ransactio	ns on Commun	ications, Vol	ume	
CVANNIES		1		<u> </u>	DATE CONSIDERED	<u> </u>				
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Sheet 7 of 7		·							
FORM PTO 1449 (#				ATTY DOCKET NO. SERIAL NO. NEW					
PATE	NT AND T	ENT OF COMMERCIFICATION	CE	APPLICANT Mitsuaki OSHIMA					
LIST OF RE	FERENCE se several	ES CITED BY APPLICA sheets if necessary)	ANT(S)	FILING DATE			GROUP		
Date Sul	bmitted to	PTO: October 30,	2003	October 30, 2003					
		 1		U.S. PATENT DOCUMENTS			T-	-	
*EXAMINER INITIAL		DOCUMENT NUMBER	DATE	NAME	CLA	.ss 	SUBCLASS	FILING I APPROI	
	AA	5,170,413	12-8-92	Hess et al.					
	AB								_
	AC								
			F	OREIGN PATENT DOCUMENTS				·	
		DOCUMENT NUMBER	DATE	COUNTRY	CLA	.SS	SUBCLASS	TRANSI YES	
	AD	57-39629	3-4-82	Japan				abstract	
	AE	58-161547	9-26-83	Japan				abstract	
	AF	63-180222	7-25-88	. Japan				abstract	
	AG	92/22162	12-10-92	wo				Х	
	АН	2-94814	4-5-90	Japan			-	abstract	
	AI	61-70861	4-11-86	Japan				abstract	
	AJ	2-218279	8-30-90	Japan				abstract	
	AK	2,095,435	5-10-92	Canada		·		×	
	AL	91/20137	12-26-91	wo				х	
	АМ	2-141049	5-30-90	Japan		<u> </u>			х
	AN	2-195732	8-2-90	Japan				abstract	
	AO	5-167633	7-2-93	Japan				abstract	
	AP	2-260726	10-23-90	Japan	<u>i</u>				х
	AQ	58-161427	9-26-83	Japan				abstract	
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